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10/675,689	09/30/2003	Min Kuo	66329/00020	6171

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EXAMINER	
MCLEAN, NEIL R	
ART UNIT	**PAPER NUMBER**
2625	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/675,689	KUO ET AL.	
	Examiner	Art Unit	
	Neil R. McLean	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 December 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5,7-12,14 and 16-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 5, 7-12, 14, and 16-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Claims 1-3, 5, 7-12, 14, and 16-18 are currently pending in this application.

Response to Arguments

2. Regarding Applicant's Argument/Newly Added Claim Limitation(s) (Page 8, lines 5-9):

"means adapted for receiving preauthorization data from the associated user corresponding to a pre-authorization of a routing of the print job to at least one secondary associated printer device;

means adapted for determining elapsed time relative to commencement of the print job;

Examiner's Response:

The Examiner respectfully believes that the main reference Owa discloses these limitations:

means adapted for receiving preauthorization data (Referring to the print processing flowchart of Figure 6; at step S16, the output destination printer selection section 11 corrects the total score of each of the printers to be selected based on the document features retained in the document feature extraction section 16; Note: The Examiner perceives the applicants 'preauthorization data' to be equivalent to Owa's printer selection conditions as shown in e.g., Figure 5) from the associated user corresponding to a pre-authorization of a routing of the print job to at least one secondary associated printer

device (if the user does not know the performance or specifications of each printer, he or she simply sets print conditions on the GUI of the printer driver, whereby the printer that can best satisfy the user's needs is selected automatically (Column 7, lines 23-27)

means adapted for determining elapsed time relative to commencement of the print job (If several printers gain the same highest score, one of them is selected as an optimum printer based on a proper criterion, such as the printer name order, ascending order of the number of **printer operation times**, identification number order, or preset priority.; Column 7, lines 6-11);

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3, 5, 7-12, 14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owa et al. (US 6,348,971) in view of Idehara (US 2001/0052995) and further in view of Sesek (US 7,151,611).

Regarding Claim 1: (Currently Amended)

Owa et al. teaches a system for optimized routing of print jobs comprising:

means adapted for commencing a print job to a print port associated with a client machine (Column 4, lines 44-52; See Figure 1);

queuing means (Input Buffer 63 in Figure 8) adapted for queuing print job data in accordance with a commenced print job (Column 18, lines 6-10);

means adapted for receiving a print optimization instruction from an associated user (Column 18, lines 11-18; Printer information retentions means; Column 2, lines 1-10);

means adapted for selectively communicating the print job data to the print port so as to generate a printout therefrom (Column 4, lines 44-52; See Figure 1);

terminal means (See Status Monitor Section 13 in Figure 2) adapted for receiving status data (See Status Information in Figure 4) from each of a plurality of associated printer devices, which status data includes data representative of a commitment level of each associated printer device relative to prior print job requests associated therewith (Column 4, lines 6-13 and see Status Monitor Section 13 in Figure 2 and Flowchart Step S3 in Figure 6);

means adapted for receiving a print optimization instruction from the associated user in response to an issued prompt so as to commence selection of an alternative associated printer device for printing (Column 18, lines 11-18; Printer information retentions means);

means adapted for receiving preauthorization data (Referring to the print processing flowchart of Figure 6; at step S16, the output destination printer selection section 11 corrects the total score of each of the printers to be selected based on the document features retained in the document feature extraction section 16; Note: The Examiner perceives the applicants 'preauthorization data' to be equivalent to Owa's printer selection conditions as shown in e.g., Figure 5) from the associated user corresponding to a pre-authorization of a routing of the print job to at least one secondary associated printer

device (if the user does not know the performance or specifications of each printer, he or she simply sets print conditions on the GUI of the printer driver, whereby the printer that can best satisfy the user's needs is selected automatically (Column 7, lines 23-27)

means adapted for determining elapsed time relative to commencement of the print job (If several printers gain the same highest score, one of them is selected as an optimum printer based on a proper criterion, such as the printer name order, ascending order of the number of **printer operation times**, identification number order, or preset priority.; Column 7, lines 6-11);

test means (the software or device that performs the functions described in Column 5, lines 41-60) adapted for testing the status data against selected test criteria (See Printer Selection Conditions in Figure 5), elapsed time, and received delay criteria to determine whether at least one alternative associated printer device is desired for printing (Column 5, lines 41-44 and lines 51-57 and see Output Destination Printer Selection Section 11 in Figure 2 and Flowchart Steps S5 and S6 in Figure 6); and

the terminal means (See Data Transfer Section 17 in Figure 2) including means adapted for autonomously redirecting, in accordance with received preauthorization data, the print job data from a primary designated associated printer device by assigning the print port to a device port of a secondary associated printer device of the plurality thereof in accordance with the print optimization instruction and an output of the test means (Column 7, lines 3-6 and Flowchart Step S19 in Figure 6).

Owa et al. does not disclose expressly a means adapted for receiving delay criteria data corresponding to an associated delay period associated with commencement of the print job.

Idehara (US 2001/0052995) discloses a means adapted for receiving delay criteria data corresponding to an associated delay period associated with commencement of the print job (When the time it takes to finish work such as a copying job by a digital copying machine alone is too long due to a strict condition set by the user for the copying job, a supplementary output apparatus is selected as an apparatus to be used in conjunction with the digital copying machine and data to be printed is transferred to the supplementary output apparatus in order to meet the condition as described in [0216]. Referring to Figure 48; The screen displays the time it takes to finish the job by using only the A digital copying machine 41 and a query about whether or not image data is to be transferred to another output apparatus to the user as described in [0217]. Supplementary output apparatuses and their locations are each displayed as an icon on a layout diagram. In addition, while a substitute or supplementary output apparatus having a short distance from the apparatus in question is given a high priority in the selection of a substitute or supplementary output apparatus, a high priority can also be given to a substitute or supplementary apparatus having a high processing speed, that is, high printing and/or sorting speeds. As an alternative, the user is allowed to determine which parameter is to be used as a base in giving a high priority to a substitute or supplementary output apparatus as described in [0224].)

Idehara and Owa are combinable because they are from the same field of endeavor of image processing; e.g., both references disclose prioritizing network printers. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a means adapted for receiving delay criteria data corresponding to an associated delay period associated with commencement of the print job.

The suggestion/motivation for doing so would have been to allow an input-output apparatus to be selected with ease by displaying an actual layout of input-output apparatuses connected to a network system in a diagram showing places of business, floors or rooms where the apparatuses are installed. This would allow the user to identify an output apparatus installed at a location in closest proximity to a recipient of a

text or another message transmitted to the recipient with ease. Therefore, it would have been obvious to combine Idehara with Owa to obtain the invention as specified in claim 1.

Owa et al. discloses all of the above except for a queuing means adapted for queuing print job data.

However it is well known in the art for a computer to have a print queue for providing temporary storage of data that is to be processed at a later time. (Official Notice)

At the time of the invention it would have been obvious to one of ordinary skill in the art to employ a print queue. The suggestion/motivation for doing so would be to prevent the data from being lost by using a print queue; and it would also prevent the host from sending print data to the printer while the printer is not capable of receiving any print data. Therefore, it would have been obvious to combine a print queue with the printing system of Owa et al. to obtain the invention of Claim 1.

Owa and Idehara do not disclose expressly a means for changing a delay period in advance of submission of a print job.

Sesek discloses wherein the user can specify an alternative print parameter in advance of a print job, in particular, the length of a delay period (When a Graphical User Interface user modifies printer properties, he will typically launch a Printer Properties menu 74 from a Print menu 72 from within an application. The present invention **allows the user to specify how long these temporary printer properties are to be in effect** before the printer properties for the selected printer are reset back to their default

values. In this embodiment, the user enables this capablility by selecting or activating the Printer Options Retention Enable 86. The time that the modified printer properties will remain effective **can then be set utilizing the Printer Properties Retention Time Selector 82**.).

Owa, Idehara & Sesek are combinable because they are from the same field of endeavor of image processing; e.g., all three references disclose methods of modifying print properties based on user preference or print job priority. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the user to control how long temporary printer properties are to be in effect before being set back to their default value. The suggestion/motivation for doing so is because one of the problems that arises when changing printer properties from within application programs is that many, if not most, of these temporary printer properties automatically change back to their default values for the currently selected printer after an undefined period of time. This process of reverting printer properties back to default values for this printer appears to a user to be somewhat arbitrary. For example, many of these temporary printer properties are maintained by an application. As long as that application continues to execute, any print requests on the currently selected printer will utilize these temporary printer properties. On the other hand, the temporary printer properties can be lost when an application terminates. In some other instances, temporary printer properties only remain changed for a single print request, after which time they are reset to their default values.

Sesek discloses at Column 2, lines 30-40 that one result of temporarily modified printer properties reverting to their default values at what appear to a user to be arbitrary times is that sometimes print requests are printed with inappropriate settings.

For example, if a user prints transparencies from a transparency printer tray and then goes on to do something else; he may be surprised when a subsequent print request also prints on transparencies. Alternatively, the user may be trying to utilize duplex printing, only to find that subsequent print requests end up being printed on one side of a page because printer properties have been unexpectedly set back to their default values.

Therefore, it would have been obvious to combine Sesek's printer control method with Owa and Idehara's methods of prioritizing network printing to obtain the invention as specified in order to control the reversion of temporary printer properties back to their default values.

Regarding Claim 10:

Claim 1 teaches the system. Claim 10 is obvious in view of Owa, Idehara & Sesek because the method is achieved using the system steps of Claim 1.

Regarding Claim 2: (Original)

Owa et al. further discloses the system for optimized routing of print jobs of claim 1 wherein the test criteria includes data representative of a commitment level of the at least one alternate associated printer device (Column 6, lines 37-54 and Flowchart Steps S16 and S17 in Figure 6).

Regarding Claim 11: (Original)

Claim 2 teaches the system. Claim 11 is obvious in view of Owa, Idehara & Sesek because the method is achieved using the system steps of Claim 2.

Regarding Claim 3: (Original)

The system for optimized routing of print jobs of claim 2 wherein the print job data is selectively redirected to the secondary associated printer device which has the lowest commitment level (Column 7, lines 3-6 and see Flowchart Steps S19/S21 in Figure 6).

Regarding Claim 12: (Original)

Claim 3 teaches the system. Claim 12 is obvious in view of Owa, Idehara & Sesek because the method is achieved using the system steps of Claim 3.

Regarding Claim 4: (Cancelled)

Regarding Claim 5: (Cancelled)

Regarding Claim 6: (Cancelled)

Regarding Claim 7: (Currently Amended)

Owa et al. further discloses the system for optimized routing of print jobs of claim 1 wherein the means adapted for selectively redirecting the print job data the further

comprises means adapted for displaying all available associated printer devices for the user to select a secondary associated printer device in which to route the print job data (Column 12, lines 55-60).

Regarding Claim 16: (Previously Presented)

Claim 7 teaches the system. Claim 16 is obvious in view of Owa, Idehara & Sesek because the method is achieved using the system steps of Claim 7.

Regarding Claim 8: (Previously Presented)

Owa et al. further discloses the system for optimized routing print jobs of claim 6 wherein the means adapted for redirecting the print job data further comprises:

means adapted to receive user input to terminate the routing of the print job data to the secondary associated printer device (Column 13, lines 1-4 and User Approved Screen 81 in Figure 12b); and

terminating means adapted to terminate routing of the print job data to the secondary associated printer device in response to user input (see Cancel button 84 in Figure 12b).

Regarding Claim 17: (Original)

Claim 8 teaches the system. Claim 17 is obvious in view of Owa, Idehara & Sesek because the method is achieved using the system steps of Claim 8.

Regarding Claim 9: (Previously Presented)

Owa et al. further discloses the system for optimized routing of print jobs of claim 1 wherein the means adapted for prompting an associated user is a graphical user interface (See Figures 12a and 12b).

Regarding Claim 18: (Original)

Claim 9 teaches the system. Claim 18 is obvious in view of Owa, Idehara & Sesek because the method is achieved using the system steps of Claim 9.

Regarding Claim 13: (Cancelled)

Regarding Claim 14: (Cancelled)

Regarding Claim 15: (Cancelled)

Regarding Claim 19 – 30: (Cancelled)

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kato (US 6,760,120) teaches a system that automatically selects an optimum printing device according to the characteristics of a page in units of pages to print the page, thereby reducing the load on the operator in print processing.

Examiner Notes

6. The Examiner cites particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully considers the references in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or as disclosed by the Examiner.

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. McLean whose telephone number is (571)270-

1679. The examiner can normally be reached on Monday through Friday 7:30AM-4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571.272.7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Neil R. McLean/
Examiner, Art Unit 2625

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625